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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/997,347	Applicant(s) MACLACHLAN, JULIA	
	Examiner Jessica L. Rossi	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/20/04, RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The declaration filed on 9/29/04 under 37 CFR 1.131 has been considered but is ineffective to overcome the Hartig reference (US 2003/0024180).

The evidence submitted is insufficient to establish a conception of the invention prior to the effective date of the Hartig reference. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

In establishing conception, Applicant must show possession of every feature recited in the count and that every limitation of the count must have been known to the inventor at the time of alleged conception (see MPEP 2138.04). One considering the totality of the evidence would have appreciated that Applicant has failed to meet these criteria. For example, the declaration only shows successful removal of the hydrophobic coating using UV light having a wavelength of 172 nm (see all Exhibits) while the present claims set forth using UV light having a wavelength in the range of 100-200 nm (see independent claim 23). Also, the declaration says nothing about the hydrophobic coating being provided on a vehicle glazing. Also note the declaration briefly mentions the hydrophobic coating consisting of a long chain fluorosilane (Exhibit A) while the present claims state that the coating can be polysiloxane, polyfluorosiloxane, or diamond-like carbon.

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2. The declaration under 37 CFR 1.132 filed 9/29/04 is insufficient to overcome the rejection of claims 23-33 based upon 35 U.S.C. 112, 1st paragraph as set forth in paragraph 8 of the last Office action because:

Applicant's opinion that one skilled in the art would understand that a hydrophobic coating would be applied to the exterior of a vehicle window (see paragraph 9 of declaration and 1st paragraph on p. 8 of arguments dated 9/29/04) and therefore that one skilled in the art reading the present specification as a whole would have appreciated that the hydrophobic coating of the present invention is applied to the exterior of the vehicle window is not supported by any factual evidence (see MPEP 716.01(b) section titled "Opinion Evidence"). In fact, the examiner invites Applicant to read US 5424130 to Nakanishi, which teaches a water repellant (hydrophobic) coating 2 provided on both the interior and exterior surfaces of a vehicle window 1 (Figure 1; abstract; column 1, lines 15-16; column 6, lines 35-36).

3. The declaration under 37 CFR 1.132 filed 9/29/04 is insufficient to overcome the rejection of claim 23 based upon Curtze (US 4543283) as set forth in paragraph 12 of the last Office action because:

Curtze was never modified to have or used to show a hydrophobic coating on the exterior of the vehicle glazing, as asserted by Applicant in paragraph 8 of the declaration. As set forth in paragraph 12 of the last office action, Curtze was applied without giving any weight to the limitations considered to be new matter (hydrophobic coating on exterior of vehicle glazing).

4. The declaration under 37 CFR 1.132 filed 9/29/04 is sufficient to overcome the rejection of claim 23 based upon the secondary reference to Tweadey (US 5131967), as set forth in paragraphs 12 and 14 of the last office action.

Considering all the evidence as whole, the examiner agrees that one skilled in the art would not have been motivated by the teaching of Tweadey to use UV light to remove a hydrophobic coating from the surface of a vehicle glazing, as asserted by Applicant in paragraph 11 of the declaration. Tweadey teaches using UV light to remove a metal-based coating, located on the interior of the vehicle glazing, in order to protect the coating from exposure to the environment and therefore prevent corrosion of the coating; therefore, the skilled artisan reading the reference as a whole would have appreciated the coating of Tweadey not being hydrophobic.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 23-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 23, the specification does not have support for the hydrophobic coating being on the exterior surface of the vehicle glazing, wherein the exterior surface is exposed to the exterior of the vehicle (see paragraph 2 above).

Regarding claim 26, the specification does not have support for the water contact angle being equal to 100° prior to irradiating (spec at p. 5, 1st paragraph only has support for greater than 100°), irradiating for 120 seconds or less (spec at p. 4, 3rd paragraph only has support for 5-

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120 sec and therefore does not have support for 0<time>5 sec), or the water contact angle being equal to 30° after irradiating (spec. at p. 5, 1st paragraph and Table 1 on p. 6 only have support for less than 30°). Applicant is directed to MPEP 2163.05, p. 2100-182, section titled "range limitations."

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 23-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 23, it recites the limitation "the vehicle" in line 5. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change this phrase to --a vehicle--.

Regarding claim 34, it is unclear what Applicant intends by the limitations set forth in lines 1-5 and 9-10 since these limitations were already stated in claim 23. Applicant is asked to clarify. It is suggested to amend claim 34 by deleting "for selectively removing a hydrophobic coating that is disposed on an area of a surface of a vehicle glazing" in lines 1-2, deleting lines 3-5, and deleting "; and adhering an item to the area from which the hydrophobic coating has been removed" in lines 9-10.

Also regarding claim 34, it recites the limitation "the source" in line 6. There is insufficient antecedent basis for this limitation in the claim. It is suggested to change this phrase to --a source--.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtze et al. (US 4543283; of record) in view of Yoshinori et al. (JP 2001-146439; provided in IDS) and/or Van Der Putten et al. (US 6316059).

**The following rejection is set forth not giving weight to the limitations raised as a new matter issue – specifically, the limitations pertaining to the hydrophobic coating being on the exterior surface of the vehicle glazing, wherein the exterior surface is exposed to the exterior of the vehicle. Please note that the rejections set forth in paragraphs 14, 18, 22, 26 and 30 below do give weight to these limitations.*

With respect to claim 23, Curtze is directed to a vehicle glazing 10 comprising a glass substrate 12, an adhesive 16 and an anti-lacerative sheet 14 having a functional coating on its entire surface (coating not shown; Figure 2; column 4, lines 21-23; column 7, lines 8-10). The reference teaches the coating being silane-based, such as silica-reinforced methyl-siloxane (column 8, lines 19-21), which the skilled artisan would have appreciated as being hydrophobic. The reference also teaches removing peripheral portions of the coating from the anti-lacerative sheet before adhering a gasket or frame thereto (column 7, lines 10-13; column 8, lines 21-24). However, the reference is silent as to how the coating is removed and therefore is silent as to using UV radiation having a wavelength in the range of 100-200 nm.

It is known in the art to remove a hydrophobic silane-based coating from portions of a glass substrate by irradiating the same with UV light having a wavelength that falls within

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Applicant's claimed range, as taught by Yoshinori (teaches water-repellant silane-based coating on glass used for vehicle window and removing with UV light having wavelength of about 200 nm; abstract, oral translation and Section V of international preliminary examination report) and/or Van Der Putten (teaches silane-based coating on glass used for flat panel displays and removing with UV light having wavelength of about 185 nm; column 3, lines 35-39; column 4, lines 43-47 and 59-60; column 6, lines 14-27).

One reading the Curtze reference as whole would have appreciated that a particular coating removal method is not critical to the invention and therefore would have been motivated to use UV radiation having a wavelength that falls within Applicant's claimed range because such is known for removing a hydrophobic silane-based coating from a glass substrate in the vehicle window art and other related arts, as taught by Yoshinori and/or Van Der Putten, where such a removal method is fast and efficient and less likely to damage the underlying substrate as would mechanical removal methods such as grinding.

Regarding claim 24, Curtze teaches the coating comprising a siloxane (column 8, lines 19-21). Selection of a particular type of siloxane coating would have been within purview of the skilled artisan at the time the invention was made depending on the particular function of the coating.

Regarding claim 26, the contact angle is a function of the type of coating and therefore the skilled artisan would have appreciated that the organic, hydrophobic coating of Curtze would have a contact angle similar to that of the organic, hydrophobic coating of the present invention. The skilled artisan would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath.

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The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc. However, it is noted that Van Der Putten teaches irradiating for 120 seconds (column 4, lines 51-52).

Regarding claim 27, Curtze teaches applying a primer to the portions of the anti-lacerative sheet from which the coating was removed (column 7, lines 14-16 and 25-27). Curtze teaches applying an adhesive (second primer; column 7, lines 28-30 and 36-37) to the primer.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has placed no criticality of the type of adhesive used.

Regarding claim 29, Curtze teaches bonding an elastomeric member 18 to the portions of the anti-lacerative sheet having the primer thereon (column 4, lines 40-44; column 7, lines 25-27).

Regarding claims 30-33, Curtze teaches the elastomeric member being a frame member or gasket (column 4, lines 40-44).

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtze and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of Kizaki et al. (US 5763892; of record).

Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation

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having a wavelength of 172 nm because such is known for removing organic substances from the surface of a glass substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52).

12. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curtze and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of the collective teachings of Tweadey et al. (US 5131967; of record) and Volkmann et al. (US 4931125).

Regarding claim 34, the references are silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein irradiation of the coating selectively removes the same from areas of the glass, as taught by Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7).

It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of Curtze because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

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Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

13. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Curtze, Yoshinori and/or Van Der Putten, and the collective teachings of Tweadey et al. and Volkmann et al. as applied to claim 34 above, and further in view of Kizaki et al.

Regarding claim 36, Applicant is directed to the rejection of claim 25 in paragraph 11 above.

14. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartig et al. (US 2003/0024180; of record) in view of Yoshinori and/or Van Der Putten and also in view of Curtze.

With respect to claim 1, Hartig is directed to a vehicle glazing comprising a glass substrate 10 having a hydrophobic water-repellant exterior functional coating 20, which is applied to the entire surface of the glass and then removed from the peripheral portions thereof (Figure 5; [0011]; [0014], [0047], [0052]). The reference teaches positioning a gasket (not shown) on a portion of the glass where the coating was removed (Figure 5; p. 6, [0060]). The reference is silent as to removing the coating using UV radiation having a wavelength in the range of 100-200 nm and adhering the gasket to the substrate.

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It is known in the art to remove a hydrophobic coating from portions of a glass substrate by irradiating the same with UV light having a wavelength that falls within Applicant's claimed range, as taught by Yoshinori (teaches water-repellant coating on glass used for vehicle window and removing with UV light having wavelength of about 200 nm; abstract, oral translation and Section V of international preliminary examination report) and/or Van Der Putten (teaches hydrophobic coating on glass used for flat panel displays and removing with UV light having wavelength of about 185 nm; column 3, lines 35-39; column 4, lines 43-47 and 59-60; column 6, lines 14-27).

One reading the Hartig reference as whole would have appreciated that a particular coating removal method is not critical to the invention (last sentence of [0078]) and therefore would have been motivated to use UV radiation having a wavelength that falls within Applicant's claimed range because such is known for removing a hydrophobic coating from a glass substrate in the vehicle window art and other related arts, as taught by Yoshinori and/or Van Der Putten, where such a removal method is fast and efficient and less likely to damage the underlying substrate as would mechanical removal methods such as grinding.

It would have been obvious to the skilled artisan at the time the invention was made to adhere the gasket to the glass substrate of Hartig because it is known in the art to remove a hydrophobic coating from the surface of a vehicle glazing before adhesively bonding a gasket thereto, as taught by Curtze (column 7, lines 10-13; column 8, lines 21-24), where an adhesive keeps the gasket from dislodging while also providing a seal between the gasket and substrate.

Regarding claim 24, one reading the Hartig reference as a whole would have appreciated that no criticality is placed on the type of coating (section [0042]) and therefore selection of a

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particular type of coating would have been within purview of the skilled artisan at the time the invention was made depending on the intended function thereof. It being noted that the claimed coatings are well known and conventional in the art, wherein the present invention has placed no criticality on the type of coating.

Regarding claim 26, the contact angle is a function of the type of coating and therefore the skilled artisan would have appreciated that the hydrophobic coating of Hartig would have a contact angle similar to that of the organic, hydrophobic coating of the present invention. The skilled artisan would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath. The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc. However, it is noted that Van Der Putten teaches irradiating for 120 seconds (column 4, lines 51-52).

Regarding claims 27 and 29-31, Hartig is silent as to applying a primer and an adhesive to the portion of the glass from which the coating was removed before positioning the gasket thereon and the gasket being elastomeric.

It is known in the art to remove a portion of a coating from the periphery of a substrate so that primer and adhesive (second primer; column 7, lines 28-30 and 36-37) can be applied to this area to facilitate bonding of an elastomeric gasket thereto, as taught by Curtze (discussed above). Therefore, it would have been obvious to the skilled artisan at the time the invention was made to apply a primer and adhesive to the coating-free portions of the substrate of Hartig before positioning the gasket because such is known in the art, as taught by Curtze, where this provides

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a good seal between the gasket and substrate. It would have been obvious to the skilled artisan to use an elastomeric gasket for that of Hartig because such is known in the art, as taught by Curtze, wherein such material prevents any damage (i.e. scratching) to the glass.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has not placed any criticality on the type of adhesive used.

Regarding claims 32-33, the skilled artisan reading Hartig as a whole would have appreciated that the type of item placed on the coating-free portion of the glass is not critical to the invention with gasket only being illustrative. Therefore, selection of a particular item would have been within purview of the skilled artisan at the time the invention was made. It being noted that fastening and mounting devices are well known and conventional in the art.

15. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartig, Yoshinori and/or Van Der Putten, and also Curtze as applied to claim 23 above, and further in view of Kizaki.

Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation having a wavelength of 172 nm because such is known for removing a coating from a substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52), wherein such a wavelength removes the coating efficiently.

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16. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hartig, Yoshinori and/or Van Der Putten, and also Curtze as applied to claim 23 above, and further in view of the collective teachings of Tweadey and Volkmann.

Regarding claim 34, the references are silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein irradiation of the coating selectively removes the same from areas of the glass, as taught by Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7).

It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of Hartig because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

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Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

17. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hartig, Yoshinori and/or Van Der Putten, also Curtze, and also the collective teachings of Tweadey and Volkmann as applied to claim 34 above, and further in view of Kizaki.

Regarding claim 36, Applicant is directed to the rejection of claim 25 above.

18. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinori et al. in view of Curtze and Teranishi et al. (US 5556667).

With respect to claim 23, Yoshinori is directed to a vehicle glazing comprising a glass substrate having a hydrophobic, water-repellant, silane-based functional coating on its exterior surface, wherein the coating is removed from peripheral portions of the substrate by irradiating with UV light having a wavelength of about 200 nm (abstract; oral translation; Section V of international preliminary examination report). The reference is silent as to adhering an item to an area of the substrate from which the coating was removed.

It would have been obvious to the skilled artisan at the time the invention was made to adhere an item, such as a gasket or frame, to the glass substrate of Yoshinori because it is known in the art to remove a silane-based hydrophobic coating from the surface of a vehicle glazing before adhesively bonding a gasket or frame thereto, as taught by Curtze (column 7, lines 10-13; column 8, lines 21-24), where such an item allows for mounting of the vehicle glazing within the vehicle and where the presence of an adhesive keeps the gasket/frame from dislodging while also providing a seal between the gasket/frame and substrate (examiner recognizes that coating of

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Curtze on interior of glazing but note that gasket/frame attached to both interior and exterior surfaces of glazing). The examiner would have been further motivated by the fact that it is known in the art to adhesively attach a molded item to the exterior surface of a vehicle glazing having a water-repellant coating only provided on those areas of the exterior surface where the item is not adhered to the glazing, as taught by Teranishi (column 1, lines 48-56).

Regarding claim 24, Yoshinori teaches the coating comprising silane groups, which form siloxane bonds. Selection of a particular type of siloxane coating would have been within purview of the skilled artisan at the time the invention was made depending on the particular function of the coating.

Regarding claim 26, the contact angle is a function of the type of coating and therefore the skilled artisan would have appreciated that the organic, hydrophobic coating of Yoshinori would have a contact angle similar to that of the organic, hydrophobic coating of the present invention. The skilled artisan would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath. The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc.

Regarding claim 27, Curtze teaches applying a primer to the portions of the anti-lacerative sheet from which the coating was removed (column 7, lines 14-16 and 25-27). Curtze teaches applying an adhesive (second primer; column 7, lines 28-30 and 36-37) to the primer.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being

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noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has placed no criticality of the type of adhesive used.

Regarding claim 29, Curtze teaches bonding an elastomeric member 18 to the portions of the anti-lacerative sheet having the primer thereon (column 4, lines 40-44; column 7, lines 25-27).

Regarding claims 30-33, Curtze teaches the elastomeric member being a frame member or gasket (column 4, lines 40-44).

19. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinori, Curtze and Teranishi as applied to claim 23 above, and further in view of Kizaki.

Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation having a wavelength of 172 nm because such is known for removing organic substances from the surface of a glass substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52).

20. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinori, Curtze and Teranishi as applied to claim 23 above, and further in view of Tweadey and Volkmann.

Regarding claim 34, Yoshinori is silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein

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irradiation selectively removes the same from areas of the glass, as taught by Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7). It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of Yoshinori because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

21. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshinori, Curtze, Teranishi, and the collective teachings of Tweadey and Volkmann as applied to claim 34 above, and further in view of Kizaki.

Regarding claim 36, Applicant is directed to the rejection of claim 25 above.

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22. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art referred to by Teranishi in view of Curtze and Yoshinori and/or Van Der Putten.

**Note the prior art of Teranishi qualifies as 102(b) type art since the reference was published more than one year before filing of the present application; therefore, this reference is a statutory bar and cannot be overcome by filing a 131 Declaration (see MPEP 715(II), p. 700-239).*

With respect to claim 23, the prior art referred to by Teranishi is directed to providing a hydrophobic coating on the exterior surface of a vehicle glazing where a mask is used during the coating process to prevent the coating from being deposited along the periphery of the glazing. The prior art wants to prevent the coating from being deposited on these selected areas so that a molding can be adhesively bonded to the selected areas in the absence of a hydrophobic coating, whose presence would detrimentally affect the performance of the adhesive. The prior art uses a mask to cover the selected areas during the coating process; however, removal of the mask produces a raised portion along the edge of the coating due to the surface tension of the coating where this raised portion produces optical interference thereby making the coating edge too conspicuous (Figure 4; column 1, line 47 – column 2, line 5).

The prior art is silent as to applying the coating to the selected areas and using UV light to remove the coating from the selected areas.

It is known in the art to apply a hydrophobic coating to the entire surface of a vehicle glazing and then remove the coating only along the periphery of the glazing before adhesively bonding a molding member such as a gasket or frame thereto, as taught by Curtze (column 7, lines 10-13; column 8, lines 21-24). Therefore, it would have been obvious to the skilled artisan

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to apply the hydrophobic coating of the prior art to the entire surface of the glazing and then remove the coating along the periphery of the glazing before adhesively bonding the molding thereto because such is known in the art, as taught by Curtze, where this eliminates the need to use a mask during the coating process and therefore eliminates the unwanted raised portion produced in the edge of the coating upon removal of the mask.

It is known in the art to remove a hydrophobic coating from portions of a glass substrate by irradiating the same with UV light having a wavelength that falls within Applicant's claimed range, as taught by Yoshinori (teaches water-repellant coating on glass used for vehicle window and removing with UV light having wavelength of about 200 nm; abstract, oral translation and Section V of international preliminary examination report) and/or Van Der Putten (teaches silane-based coating on glass used for flat panel displays and removing with UV light having wavelength of about 185 nm; column 3, lines 35-39; column 4, lines 43-47 and 59-60; column 6, lines 14-27).

One reading the Curtze reference as whole would have appreciated that a particular coating removal method is not critical to the invention and therefore would have been motivated to use UV radiation having a wavelength that falls within Applicant's claimed range for removing the coating of the prior art because such is known for removing a hydrophobic coating from a glass substrate in the vehicle window art and other related arts, as taught by Yoshinori and/or Van Der Putten, where such a removal technique and eliminates the need to use a mask during the coating process therefore eliminates the unwanted raised portion produced in the edge of the coating upon removal of the mask.

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Regarding claim 24, the prior art is silent as to a particular coating. Selection of a particular type of coating would have been within purview of the skilled artisan at the time the invention was made depending on the particular function of the coating. However, Yoshinori teaches a silane-based water-repellant coating (oral translation) and therefore the skilled artisan would have been motivated to use such.

Regarding claim 26, the skilled artisan would have appreciated that the contact angle is a function of the type of coating and would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath. The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc. However, it is noted that Van Der Putten teaches irradiating for 120 seconds (column 4, lines 51-52).

Regarding claim 27, it would have been obvious to apply primer because Curtze teaches applying a primer to the portions of the anti-lacerative sheet from which the coating was removed (column 7, lines 14-16 and 25-27), wherein this would improve bond strength. The prior art teaches applying an adhesive.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has placed no criticality of the type of adhesive used.

Regarding claim 29, Curtze teaches bonding an elastomeric molding member, such as a gasket or frame 18 to the portions of the anti-lacerative sheet having the primer thereon (column

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4, lines 40-44; column 7, lines 25-27). Therefore, it would have been obvious to use an elastomeric gasket/frame for that of the prior art because such is known, as taught by Curtze, wherein a gasket/frame serves to mount the glazing into the vehicle.

Regarding claims 30-33, Curtze teaches the elastomeric member being a frame member or gasket (column 4, lines 40-44).

23. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teranishi, Curtze and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of Kizaki.

Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation having a wavelength of 172 nm because such is known for removing organic substances from the surface of a glass substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52).

24. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teranishi, Curtze, and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of the collective teachings of Tweadey and Volkmann.

Regarding claim 34, the references are silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein irradiation of the coating selectively removes the same from areas of the glass, as taught by

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Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7).

It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of the prior art because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

25. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teranishi, Curtze, Yoshinori and/or Van Der Putten, and the collective teachings of Tweadey and Volkmann as applied to claim 34 above, and further in view of Kizaki.

Regarding claim 36, Applicant is directed to the rejection of claim 25 above.

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26. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (FR 2793889; refer to US 2001/0031365 for translation) in view of Curtze and also in view of Yoshinori and/or Van Der Putten.

**Note Anderson qualifies as 102(b) type art since the reference was published more than one year before filing of the present application; therefore, this reference is a statutory bar and cannot be overcome by filing a 131 Declaration (see MPEP 715(II), p. 700-239).*

With respect to claim 23, Anderson is directed to a vehicle glazing comprising a glass substrate having a water-repellant (hydrophobic) functional coating, such as silane-based coating, on its exterior surface, as taught by Anderson (sections [0020], [0055], [0057]). Anderson teaches the hydrophobic coating can be deposited on an antireflection coating already present on the substrate or the hydrophobic coating can be deposited directly on the substrate (last sentence of section [0057]). The reference is silent as to removing an area of the coating using UV light and adhering an item to the area.

It is known in the art to remove a silane-based hydrophobic coating from the surface of a vehicle glazing before adhesively bonding a gasket or frame thereto, as taught by Curtze (column 7, lines 10-13; column 8, lines 21-24). Therefore, it would have been obvious to the skilled artisan to remove an area of the silane-based hydrophobic coating of Anderson and adhesively bond a gasket/frame thereto because such is known in the art, as taught by Curtze, where a gasket/frame allows for mounting of the vehicle glazing within the vehicle and where removal of the coating results in a better bond between the gasket/frame and the glazing (examiner recognizes that coating of Curtze on interior of glazing but note that gasket/frame attached to both interior and exterior surfaces of glazing).

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It is known in the art to remove a hydrophobic silane-based coating from portions of a glass substrate by irradiating the same with UV light having a wavelength that falls within Applicant's claimed range, as taught by Yoshinori (teaches water-repellant silane-based coating on glass used for vehicle window and removing with UV light having wavelength of about 200 nm; abstract, oral translation and Section V of international preliminary examination report) and/or Van Der Putten (teaches silane-based coating on glass used for flat panel displays and removing with UV light having wavelength of about 185 nm; column 3, lines 35-39; column 4, lines 43-47 and 59-60; column 6, lines 14-27).

One reading the Curtze reference as whole would have appreciated that a particular coating removal method is not critical to the invention and therefore would have been motivated to use UV radiation having a wavelength that falls within Applicant's claimed range for removing the coating of Anderson because such is known for removing a hydrophobic silane-based coating from a glass substrate in the vehicle window art and other related arts, as taught by Yoshinori and/or Van Der Putten, where such a removal method is fast and efficient and less likely to damage the underlying substrate as would mechanical removal methods such as grinding.

Regarding claim 24, Anderson teaches the coating comprising a siloxane (section [0057]). Selection of a particular type of siloxane coating would have been within purview of the skilled artisan at the time the invention was made depending on the particular function of the coating.

Regarding claim 26, the contact angle is a function of the type of coating and therefore the skilled artisan would have appreciated that the organic, hydrophobic coating of Anderson

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would have a contact angle similar to that of the organic, hydrophobic coating of the present invention. The skilled artisan would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath. The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc. However, it is noted that Van Der Putten teaches irradiating for 120 seconds (column 4, lines 51-52).

Regarding claim 27, Curtze teaches applying a primer to the portions of the anti-lacerative sheet from which the coating was removed (column 7, lines 14-16 and 25-27). Curtze teaches applying an adhesive (second primer; column 7, lines 28-30 and 36-37) to the primer.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has placed no criticality of the type of adhesive used.

Regarding claim 29, Curtze teaches bonding an elastomeric member 18 to the portions of the anti-lacerative sheet having the primer thereon (column 4, lines 40-44; column 7, lines 25-27).

Regarding claims 30-33, Curtze teaches the elastomeric member being a frame member or gasket (column 4, lines 40-44).

27. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, Curtze, and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of Kizaki.

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Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation having a wavelength of 172 nm because such is known for removing organic substances from the surface of a glass substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52).

28. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, Curtze and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of the collective teachings of Tweadey and Volkmann.

Regarding claim 34, the references are silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein irradiation of the coating selectively removes the same from areas of the glass, as taught by Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7). It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of Anderson

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because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

29. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, Curtze, Yoshinori and/or Van Der Putten, and the collective teachings of Tweadey and Volkmann as applied to claim 34 above, and further in view of Kizaki.

Regarding claim 36, Applicant is directed to the rejection of claim 25 above.

30. Claims 23-24 and 26-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz et al. (US 4983459) in view of Curtze and also in view of Yoshinori and/or Van Der Putten.

**Note Franz qualifies as 102(b) type art since the reference was published more than one year before filing of the present application; therefore, this reference is a statutory bar and cannot be overcome by filing a 131 Declaration (see MPEP 715(II), p. 700-239).*

With respect to claim 23, Franz is directed to a vehicle glazing comprising a glass substrate having a water-repellant (hydrophobic), silane-based functional coating on its exterior surface, as taught by Franz (abstract; column 1, lines 43-45; column 3, lines 18-28). The

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reference is silent as to removing an area of the coating using UV light and adhering an item to the area.

It is known in the art to remove a silane-based hydrophobic coating from the surface of a vehicle glazing before adhesively bonding a gasket or frame thereto, as taught by Curtze (column 7, lines 10-13; column 8, lines 21-24). Therefore, it would have been obvious to the skilled artisan to remove an area of the silane-based hydrophobic coating of Franz and adhesively bond a gasket/frame thereto because such is known in the art, as taught by Curtze, where a gasket/frame allows for mounting of the vehicle glazing within the vehicle and where removal of the coating results in a better bond between the gasket/frame and the glazing (examiner recognizes that coating of Curtze on interior of glazing but note that gasket/frame attached to both interior and exterior surfaces of glazing).

It is known in the art to remove a hydrophobic silane-based coating from portions of a glass substrate by irradiating the same with UV light having a wavelength that falls within Applicant's claimed range, as taught by Yoshinori (teaches water-repellant silane-based coating on glass used for vehicle window and removing with UV light having wavelength of about 200 nm; abstract, oral translation and Section V of international preliminary examination report) and/or Van Der Putten (teaches silane-based coating on glass used for flat panel displays and removing with UV light having wavelength of about 185 nm; column 3, lines 35-39; column 4, lines 43-47 and 59-60; column 6, lines 14-27).

One reading the Curtze reference as whole would have appreciated that a particular coating removal method is not critical to the invention and therefore would have been motivated to use UV radiation having a wavelength that falls within Applicant's claimed range for

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removing the coating of Franz because such is known for removing a hydrophobic silane-based coating from a glass substrate in the vehicle window art and other related arts, as taught by Yoshinori and/or Van Der Putten, where such a removal method is fast and efficient and less likely to damage the underlying substrate as would mechanical removal methods such as grinding.

Regarding claim 24, Franz teaches the coating comprising silane groups. Selection of a particular type of siloxane coating would have been within purview of the skilled artisan at the time the invention was made depending on the particular function of the coating.

Regarding claim 26, the contact angle is a function of the type of coating and therefore the skilled artisan would have appreciated that the organic, hydrophobic coating of Franz would have a contact angle similar to that of the organic, hydrophobic coating of the present invention. The skilled artisan would have also appreciated that the contact angle after coating removal would be a function of the amount of coating removed and/or the type of substrate underneath. The skilled artisan would have also appreciated that selection of a contact time would have been within purview of the skilled artisan depending on the type of coating, its thickness, the particular source of UV light, etc. However, it is noted that Van Der Putten teaches irradiating for 120 seconds (column 4, lines 51-52).

Regarding claim 27, Curtze teaches applying a primer to the portions of the anti-lacerative sheet from which the coating was removed (column 7, lines 14-16 and 25-27). Curtze teaches applying an adhesive (second primer; column 7, lines 28-30 and 36-37) to the primer.

Regarding claim 28, selection of a particular adhesive would have been within purview of the skilled artisan at the time the invention was made depending on the materials used. It being

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noted that the claimed adhesives are well known and conventional in the art, wherein the present invention has placed no criticality of the type of adhesive used.

Regarding claim 29, Curtze teaches bonding an elastomeric member 18 to the portions of the anti-lacerative sheet having the primer thereon (column 4, lines 40-44; column 7, lines 25-27).

Regarding claims 30-33, Curtze teaches the elastomeric member being a frame member or gasket (column 4, lines 40-44).

31. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franz, Curtze, and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of Kizaki.

Regarding claim 25, selection of a particular wavelength would have been within purview of the skilled artisan at the time the invention was made depending on the particular hydrophobic coating being removed. However, it would have been obvious to use UV radiation having a wavelength of 172 nm because such is known for removing organic substances from the surface of a glass substrate, as taught by Kizaki (column 1, lines 16-24; column 15, lines 27 and 45-46 and 52).

32. Claims 34-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Franz, Curtze, and Yoshinori and/or Van Der Putten as applied to claim 23 above, and further in view of the collective teachings of Tweadey and Volkmann.

Regarding claim 34, the references are silent as to using electro-mechanical means to provide relative movement between the source of UV light and the coating.

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It is known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, wherein irradiation of the coating selectively removes the same from areas of the glass, as taught by Tweadey (column 4, lines 1-3 and 63-67; column 5, lines 41-43 and 50-51; column 6, lines 1-7).

It is also known in the automotive art to use electro-mechanical means to provide relative movement between a source of electromagnetic radiation and a glass substrate, where irradiation of the substrate surface serves to prime the same and therefore improve adhesive bonding between the substrate and a gasket, as taught by Volkmann (column 1, lines 25-30; column 2, lines 33-55; column 3, lines 32-40; column 4, lines 20-32 and 47-50; column 9, lines 30-32).

Therefore, it would have been obvious to the skilled artisan to use electro-mechanical means to provide relative movement between the source of UV light and the coating of Franz because such is known in the art, as taught by the collective teachings of Tweadey and Volkmann, where such allows for an automated process.

Regarding claim 35, Applicant is directed to the rejection of claim 24 above.

Regarding claim 37, it would have been obvious to use a robot arm because such is known, as taught by Volkmann (column 4, lines 20-25), and allows the UV light to be irradiated in the X, Y and Z directions.

Regarding claim 38, it would have been obvious to use a vision system because such is known, as taught by Volkmann (column 4, lines 20-30), because this improves the accuracy of irradiation.

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33. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Franz, Curtze, Yoshinori and/or Van Der Putten, and the collective teachings of Tweadey and Volkmann as applied to claim 34 above, and further in view of Kizaki.

Regarding claim 36, Applicant is directed to the rejection of claim 25 above.

Response to Arguments

34. On pages 6-7, Applicant argues that the restriction requirement set forth in the final office action dated 6/21/04 was improper because a restriction requirement can only be made at any time before final action.

The examiner points out that the examiner invoked election by original presentation in the final office action, which can be done at any time during prosecution (MPEP 821.03). However, this point is moot since Applicant has amended claim 34 to make it depend from claim 23 so that the examiner had no choice but to examine claims 34-38 in the current office action.

35. On pages 7-8 of the arguments, Applicant argues that the present specification does have support for the limitations pertaining to the hydrophobic coating being on the exterior surface of the vehicle glazing, which is exposed to the exterior of the vehicle, and therefore the new matter rejection set forth in the last office action should be withdrawn.

The examiner invites Applicant to reread paragraph 2 above.

36. On page 8 of the arguments, Applicant argues that the present specification does have support for the contact angle being 100°, irradiating for 120 seconds, and the contact angle being equal to 30° after irradiating and therefore the new matter rejection set forth in last office action should be withdrawn.

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The examiner invites Applicant to reread paragraph 6 above. The specification does not have support for the water contact angle being equal to 100° prior to irradiating (spec at p. 5, 1st paragraph only has support for angle greater than 100°), irradiating for 120 seconds or less (spec at p. 4, 3rd paragraph only has support for 5-120 sec and therefore does not have support for $0 < \text{time} < 5$ sec), or the water contact angle being equal to 30° after irradiating (spec. at p. 5, 1st paragraph and Table 1 on p. 6 only have support for angle less than 30°). Applicant is directed to MPEP 2163.05, p. 2100-182, section titled "range limitations."

37. On pages 9-10 of the arguments, Applicant argues that the coating of Curtze would not be durable enough to be placed on the exterior of a vehicle glazing.

As set forth in paragraph 3 above, Curtze was never modified to have or used to show a hydrophobic coating on the exterior of the vehicle glazing. Instead, Curtze was only applied as a primary reference in paragraph 10 above where no weight was given to the limitations considered to be new matter (hydrophobic coating on exterior of vehicle glazing). In all other rejections Curtze was only used as a secondary reference to show it being known in the art to remove a hydrophobic, silane-based coating from an area of the surface of a vehicle glazing before adhering a gasket/frame thereto.

38. On page 10 of the arguments, Applicant argues that one skilled in the art would not have been motivated by the teaching of Tweadey to use UV light to remove a hydrophobic coating from the surface of a vehicle glazing because Tweadey teaches using UV light to remove a metal-based coating, located on the interior of the vehicle glazing, in order to protect the coating from exposure to the environment and therefore prevent corrosion of the coating.

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The examiner points out that Tweadey is no longer be relied upon for this teaching and is instead only being relied upon to show it being known in the vehicle glazing art to use electro-mechanical means to provide relative movement between a source of UV light and a coating disposed on a glass substrate, where irradiation of the coating selectively removes the same from areas of the glass.

39. On page 11 of the arguments, Applicant argues that Hartig fails to teach or suggest using UV radiation to remove the coating, but instead suggests using grinding wheels and torches.

The examiner points out that these means are merely illustrative wherein Hartig expressly states that coating removal can be performed using ANY desired coating-removal technique (last sentence in section [0078]). Therefore, based on the teachings of Yoshinori and/or Van Der Putten, the skilled artisan would have been motivated to use UV radiation to remove the hydrophobic coating.

40. On page 11 of the arguments, Applicant argues that the Hartig reference has been removed as prior art against the presently claimed invention based on Applicant's 131 Declaration.

The examiner directs Applicant to paragraph 1 above, which explains why the declaration is not sufficient to overcome the Hartig reference.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is 571-272-1223. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jessica L. Rossi
Art Unit 1733